

AMENDMENTS**IN THE CLAIMS:**

1-33 (canceled).

34. (currently amended) A process for preparing acarbose, comprising the steps of:

- (i) transforming a host cell with a recombinant DNA molecule which comprises acarbose-synthesizing genes, and
- (ii) culturing said host cell under conditions such that said DNA molecule is expressed, and said acarbose is synthesized, and
- (iii) isolating said acarbose from culture supernatants of said host cell, wherein said DNA molecule is selected from the group consisting of (a) the nucleotide sequence of SEQ ID NO:7; (b) a nucleotide sequence which is capable of hybridizing, under stringent conditions, with the sequence of SEQ ID NO:7; (c) ~~nucleotides 1-720 of SEQ ID NO:7; (d) nucleotides 720-2006 of SEQ ID NO:7; (e) nucleotides 2268-3332 of SEQ ID NO:7; (f) nucleotides 3332-4306 of SEQ ID NO:7; (g) nucleotides 4380-5414 of SEQ ID NO:7; and (h) nucleotides 5676-6854 of SEQ ID NO:7, wherein said nucleic acid that hybridizes to SEQ ID NO:7 encodes acarbose, and (c) a nucleotide sequence which, because of the degeneracy of the genetic code differs from the nucleotide sequence of SEQ ID NO:7.~~

35. (previously presented) A process for preparing acarbose according to Claim 34, wherein said host cell is selected from the group consisting of *E. coli*, *Bacillus subtilis*, *Streptomyces*, *Actinoplanes*, *Ampullariella* or *Streptosporangium* strains, *Streptomyces hygroscopicus* var. *limoneus* or *Streptomyces glaucescens*, *Aspergillus niger*, *Penicillium chrysogenum* and *Saccharomyces cerevisiae*.

36-48. (canceled).